J. New York Entomol. Soc. 98(3):347–351, 1990

PSEUDOSAICA PANAMAENSIS, A NEW GENUS AND SPECIES OF ASSASSIN BUG FROM PANAMA (HETEROPTERA: REDUVIIDAE: SAICINAE)

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Abstract.—The new genus *Pseudosaica* is described to accommodate *Saica florida* Barber and the new species *P. panamaensis* from Panama. Forewings, male genitalia, and other structures are illustrated. Its relationship to the genera *Saica* and *Polytoxus* (Saicinae) is discussed.

The members of the subfamily Saicinae (Heteroptera: Reduviidae) are closely related to the thread-legged bugs, Emesinae (Wygodzinsky, 1966), and are characterized by the: absence of ocelli; forecoxae more or less elongate; anterior acetabula opening downward; second segment of the rostrum more or less expanded basally; opposed surfaces of the rostrum and head armed with stiff setae, a few spine-like bristles, or spines; pronotum strongly declivent to insertion of collum; and mesoscutum and scutellum produced into an erect or horizontal spine or tubercle.

Saicinae is a relatively small subfamily with 6 genera and 24 species listed by Villiers (1943) from the Western Hemisphere. The most extensive treatment of the subfamily is that of McAtee and Malloch (1923) who presented a key to the American genera and species. Since Villiers' catalog, Monte (1943) described *Paratagalis spinosus*, a new genus and species from Brazil and Maldonado (1981) described *Buninotus niger,* a new genus and species from Panama. Both authors provided a key to the American genera.

Herein, *Pseudosaica* is described to accommodate *Saica florida* Barber and the new species, *P. panamaensis.* Illustrations of the forewings, male genitalia, and other structures are given. When label data for holotypes are cited, the letters in parentheses represent separate labels with (a) being closest to the specimen. All measurements are in millimeters.

The following abbreviations are for institutions and their curators who kindly lent material used in this study: AMNH—American Museum of Natural History, New York, R. T. Schuh; KU—University of Kansas, Lawrence, R. W. Brooks; MSS—Mississippi Entomological Museum, Mississippi State, T. L. Schiefer.

Pseudosaica, new genus
Figs. 1–9

Type species: *Pseudosaica panamaensis,* new species.

Diagnosis. This genus is characterized by the spines near the humeral angles of the pronotum, mesoscutum, and scutellum; posterior border of male hypopygium produced into a single, median, erect and barbless spine; posterior margin of abdominal sternite VII and pygidial plate of the female slope ventrocephalad; and the subconical

process on the lower anterior angle of prothorax dorsocephalad of the anterior acetabulum.

Description. Body narrow and elongate; surface sericeous, interspersed with sparse to dense pilose setae. Macropterous and micropterous forms in both sexes.

Head longer than wide; bilobed, with a curved impression connecting eyes at their posterior margin. Eyes round, well separated from upper and lower margins of head. Antenna inserted level to upper margin of eyes; antennal segments slender, filiform; with fine recumbent pilosity, segments I and II also with pilose setae (length and density of pilose setae varies depending on species). Head ventrally with 1–4 pairs of long spine-like setae located ventrolaterally behind eyes opposing second rostral segment and 1–2 pairs located laterally on each jugum above rostral base. Rostral segment II bulbous, with 2 pairs of long spine-like setae opposing venter of head.

Pronotum constricted behind middle. Anterior lobe dorsally with level, subrectangular area over most of length, this area bordered laterally and anteriorly with a distinct suture, each anterolateral angle subconical; lower anterior angle in form of a subconical process (Fig. 1), and a similar subconical process at about mid-lateral level of collum. Median dorsal length of posterior lobe ⅔ or more length of anterior lobe and elevated in macropterous forms; ½ or less length of anterior lobe and not elevated in micropterous forms; with a long erect spine near humeral angles.

Mesoscutum with a long erect spine; scutellum with two processes, a small basal median erect knob, and an erect apical spine.

Hemelytra with 2 closed cells (Figs. 2, 6); micropterous forms with hemelytral pads barely attaining posterior border of metanotum; tip of hemelytra in macropterous forms extending to tip of abdomen or slightly beyond.

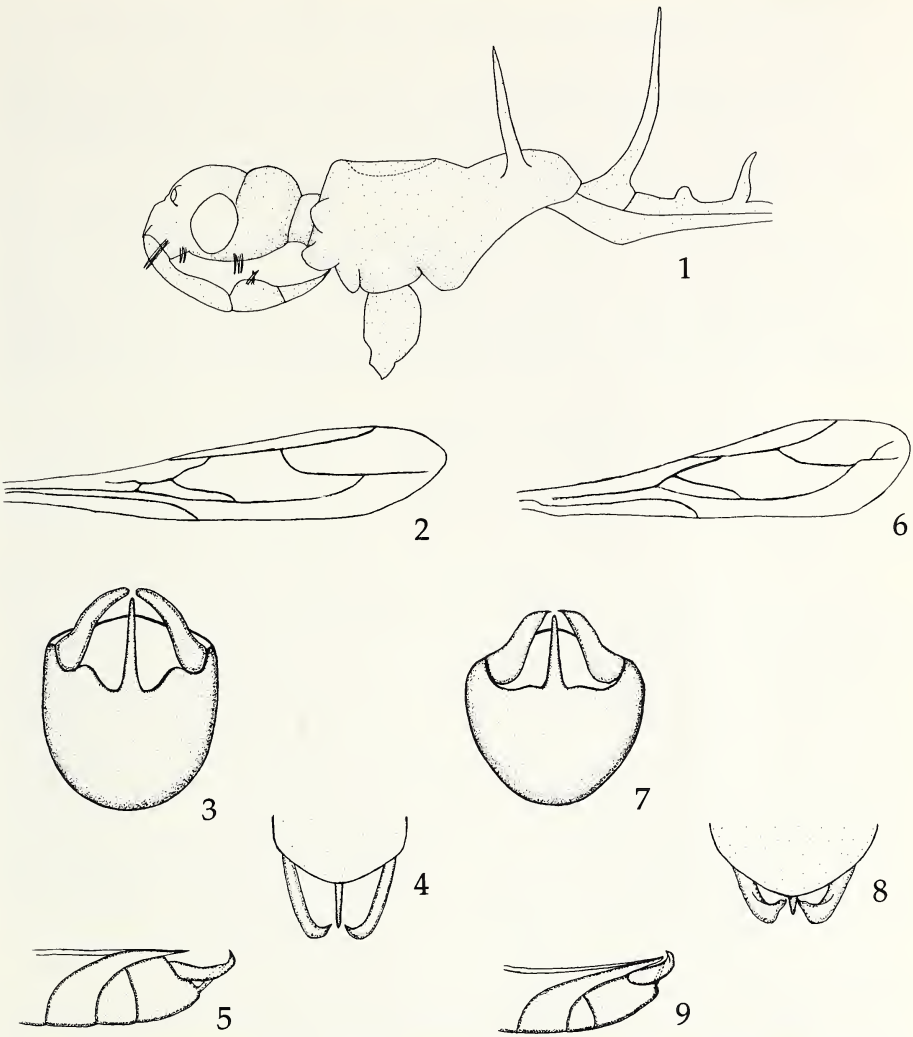
All legs lacking spines; forecoxa with apical hispid patch, foretrochanter with 2 hispid patches (1 basal and 1 apical), forefemur bowed, with 2 rows of spine-like setae (1 ventral extending along basal ⅔ and 1 on inner surface extending entire length of femur), foretibiae bowed, with 1 row of spine-like setae along basal ⅔ of inner surface; all segments of remaining legs sericeous, interspersed with long erect pilosity.

Abdomen narrow and parallel in males and macropterous females, somewhat obovate in micropterous females; posterior margin of sternite VII in females sloping ventrocephalad. Posterior border of male hypopygium produced into a single, median, erect and barbless spine; claspers curved strongly inward apically; dorsal tergite above hypopygium broadly curved. Female pygidial plate sloping ventrocephalad.

Etymology. The generic name is from the Greek *pseudos,* meaning fallacy or lie, and refers to its similarity to the genus *Saica.* The gender is feminine.

Discussion. Pseudosaica will key to *Saica* in Maldonado (1981) based on the presences of spines near the humeral angles of the pronotum and on the mesoscutum and scutellum. To facilitate generic placement of *Pseudosaica,* and to correct errors in the key, Maldonado's (1981) key to the American genera of Saicinae should be modified as follows [couplets 3–5 not repeated]:

1. Forelegs without stout spines, at most with stiff erect setae 2
– Foretibiae with one and forefemora with two, rows of stout spines 3
2. Posterior pronotal lobe with upward projecting spines or tubercles; mesoscutum and scutellum with an upward projecting apical vertical spine or tubercle; opposed surfaces of beak and head with spine-like setae 2a



Figs. 1–9. *Pseudosaica* spp. 1–5. *P. panamaensis* 1. head and pronotum, lateral view. 2. right forewing. 3. hypopygium, posterior view. 4. terminal dorsal tergite, dorsal view. 5. hypopygium, lateral view. 6–9. *P. florida* 6. right forewing. 7. hypopygium, posterior view. 8. terminal dorsal tergite, dorsal view. 9. hypopygium, lateral view.

– Pronotum unarmed; apex of mesoscutum produced into a long horizontal tapering spine; opposed surfaces of beak and head with rows of bristles ..... *Oncerotrachelus* Stål

2a. Process on lower anterior angle of prothorax acute to subacute; antennal segment II subequal to ½ the length of antennal segment I; process of male hypopygium bifurcate; posterior margin of abdominal sternum VII in females vertical to subvertical .... *Saica* Amyot and Serville

– Process on lower anterior angle of prothorax subconical; antennal segment II subequal to ⅓ the length of segment I; process of male hypopygium a single, erect barbless

spine; posterior margin of abdominal sternum VII in females sloping ventrocephalad ..... *Pseudosaica,* new genus

A preliminary review of the saicine genera suggests a close relationship among *Pseudosaica,* the New World genus *Saica,* and Old World genus *Polytoxus.* These genera share the following characters: 1) absence of spines on the forelegs; 2) spines near the humeral angles of the pronotum, mesoscutum, and scutellum; and 3) absence of setigerous spines.

Males of *Saica* differ from those of *Polytoxus* and *Pseudosaica* in having a bifurcate median process on the posterior border of the hypopygium (males of *Polytoxus* and *Pseudosaica* have a single median process on the posterior hypopygial border). In the genus *Polytoxus,* however, the median process of the hypopygium is more elaborate than in *Pseudosaica* and is more or less compressed laterally forming a keel along its ventral margin and hooked apically. In the genus *Pseudosaica* the median process of the hypopygium is a simple, erect spine. Further phylogenetic analysis of the saicine genera is needed to establish the relationships among these genera.

Pseudosaica panamaensis, new species
Figs. 1–5

Diagnosis. Recognized by the uniformly yellowish brown color, uniformly colored legs, unbanded femora and tibiae, and by the structure of the male hypopygium.

Description. Male, structure as described and illustrated for genus. General color yellowish brown, pale median fuscous stripe on pronotum. Uniformly clothed with pale recumbent setae intermixed with sparse pale pilosity on legs, antennal segments I and II, venter of thorax and abdomen.

Length 8.89, width of abdomen 1.13. Head: width 0.73, vertex 0.46, length 0.87. Rostrum: I, length 0.63; II, 0.29; III, 0.33. Antenna: I, length 4.00; II, 1.30; III, [broken]; IV, [broken]. Pronotum: length 1.45, basal width 1.20, humeral spines 1.00. Mesoscutum: spine 1.02. Scutellum: posterior spine 0.31. Venation as in Figure 2, veins forming pterostigma red.

Male hypopygium as in Figures 3–5, clothed with pale pilosity; process of hypopygium erect, extending between claspers, apex truncate in lateral view; claspers long, curved inward and slightly dorsad apically, covering median spine in normal repose.

Female unknown.

Holotype. Male, labeled: (a) "Canal Zone: Barro, Colorado. 19-VII-1924. N. Banks."; deposited in the AMNH. No paratypes.

Etymology. The specific name is taken from the type locality and the Latin "*-ensis,*" meaning "of."

Distribution. Known only from the type locality in Panama.

Pseudosaica florida (Barber), new combination
Figs. 6–9

Saica fusco-vittata [*sic*] Barber, 1914: 504. Preoccupied by *Saica fuscovittata* Stål, 1859: 262 [now *Polytoxus fuscovittata* (Stål)].
Saica fuscovittata McAtee and Malloch, 1923: 250; Villiers, 1943: 322.
Saica florida Barber, 1953: 142. New name for *Saica fuscovittata* Barber.

Diagnosis. Length 6.50–8.00. Characterized by a dorsal median fuscous stripe extending from the head to the apex of the abdomen, a similar stripe beginning

behind the eyes and continuing along the sides of the sternum, the femora with a preapical and the tibiae with a prebasal fuscous band, and the antennae, legs, and dorsum densely clothed with long pilosity. Venation as in Figure 6, macropterous and micropterous forms in both sexes. Male hypopygium as in Figures 7–9.

Holotype. Male, labeled: (a) "Everglade Fla., Apr. 9–[19]12" (b) "TYPE" (c) "Am. Mus. Nat. Hist. Dept. Invert. Zool. No. 24261" (d) "*Saica fusco-vittata* Type ♂ Barber" (e) "HOLOTYPE SAICA FUSCOVITTATA H. G. BARBER"; deposited in the AMNH.

Specimens examined. MISSISSIPPI: 1♂, Hancock Co., Pearlington, 17-VIII-1965, H. R. Hepburn (KU); 1♀, Hancock Co., W St. Louis Bay, 22-IX-1981, M. LaSalle (MSS); 1♂, Hancock Co., W St. Louis Bay, 23-I-1982, M. LaSalle, *Spartina cynosuroides* litter-Berlese (MSS); 1♀, Hancock Co., W St. Louis Bay, 20-II-1982, M. LaSalle, *Spartina cynosuroides* litter-Berlese (MSS); 1♀, Hancock Co., W St. Louis Bay, 13-III-1982, M. LaSalle, *Juncus roemerianus* litter-Berlese (MSS).

Distribution. Known in the literature only from Florida and Virginia (Froeschner, 1988). The Mississippi records, cited above, represent a new state record. Hoffmann's (1953) record of *P. florida* (as *Saica fuscovittata*) from Virginia was based on a misidentification and represents a widely distributed undescribed species of *Saica.*

ACKNOWLEDGMENTS

I would like to thank L. L. Deitz, M. H. Farrier, and H. H. Neunzig (Department of Entomology, North Carolina State University) for their review of the manuscript. Paper No. 12345 of the Journal Series of the North Carolina Agricultural Research Service, Raleigh, North Carolina 27659-7601.

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Received September 13, 1989; accepted November 21, 1989.